



# EXCERPT FROM THE PROCEEDINGS

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## OF THE NINTH ANNUAL ACQUISITION RESEARCH SYMPOSIUM THURSDAY SESSIONS VOLUME II

**U.S. Department of Defense Services Contract  
Spending and the Supporting Industrial Base, 2000–  
2011**

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and Jesse Ellman  
Center for Strategic and International Studies**

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## Preface & Acknowledgements

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Welcome to our Ninth Annual Acquisition Research Symposium! This event is the highlight of the year for the Acquisition Research Program (ARP) here at the Naval Postgraduate School (NPS) because it showcases the findings of recently completed research projects—and that research activity has been prolific! Since the ARP's founding in 2003, over 800 original research reports have been added to the acquisition body of knowledge. We continue to add to that library, located online at [www.acquisitionresearch.net](http://www.acquisitionresearch.net), at a rate of roughly 140 reports per year. This activity has engaged researchers at over 60 universities and other institutions, greatly enhancing the diversity of thought brought to bear on the business activities of the DoD.

We generate this level of activity in three ways. First, we solicit research topics from academia and other institutions through an annual Broad Agency Announcement, sponsored by the USD(AT&L). Second, we issue an annual internal call for proposals to seek NPS faculty research supporting the interests of our program sponsors. Finally, we serve as a “broker” to market specific research topics identified by our sponsors to NPS graduate students. This three-pronged approach provides for a rich and broad diversity of scholarly rigor mixed with a good blend of practitioner experience in the field of acquisition. We are grateful to those of you who have contributed to our research program in the past and hope this symposium will spark even more participation.

We encourage you to be active participants at the symposium. Indeed, active participation has been the hallmark of previous symposia. We purposely limit attendance to 350 people to encourage just that. In addition, this forum is unique in its effort to bring scholars and practitioners together around acquisition research that is both relevant in application and rigorous in method. Seldom will you get the opportunity to interact with so many top DoD acquisition officials and acquisition researchers. We encourage dialogue both in the formal panel sessions and in the many opportunities we make available at meals, breaks, and the day-ending socials. Many of our researchers use these occasions to establish new teaming arrangements for future research work. In the words of one senior government official, “I would not miss this symposium for the world as it is the best forum I’ve found for catching up on acquisition issues and learning from the great presenters.”

We expect affordability to be a major focus at this year’s event. It is a central tenet of the DoD’s Better Buying Power initiatives, and budget projections indicate it will continue to be important as the nation works its way out of the recession. This suggests that research with a focus on affordability will be of great interest to the DoD leadership in the year to come. Whether you’re a practitioner or scholar, we invite you to participate in that research.

We gratefully acknowledge the ongoing support and leadership of our sponsors, whose foresight and vision have assured the continuing success of the ARP:

- Office of the Under Secretary of Defense (Acquisition, Technology, & Logistics)
- Director, Acquisition Career Management, ASN (RD&A)
- Program Executive Officer, SHIPS
- Commander, Naval Sea Systems Command
- Program Executive Officer, Integrated Warfare Systems
- Army Contracting Command, U.S. Army Materiel Command



- Office of the Assistant Secretary of the Air Force (Acquisition)
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- Director of Open Architecture, DASN (RDT&E)
- Program Executive Officer, Littoral Combat Ships

We also thank the Naval Postgraduate School Foundation and acknowledge its generous contributions in support of this symposium.

James B. Greene Jr.  
Rear Admiral, U.S. Navy (Ret.)

Keith F. Snider, PhD  
Associate Professor



## Panel 16. DoD Services Contracting: Trends and Characteristics

Thursday, May 17, 2012	
9:30 a.m. – 11:00 p.m.	<p><b>Chair: Mr. Richard T. Ginman</b>, Director, Defense Procurement and Acquisition Policy</p> <p><b>Discussant: Alan Chvotkin Esq.</b>, Executive Vice President and Counsel, Professional Services Council</p> <p><b><i>U.S. Department of Defense Services Contract Spending and the Supporting Industrial Base, 2000–2011</i></b></p> <p>David Berteau, Guy Ben-Ari, Greg Sanders, David Morrow, and Jesse Ellman, <i>Center for Strategic and International Studies</i></p> <p><b><i>Services Supply Chain in the Department of Defense: Drivers of Acquisition Management Practices in the Army</i></b></p> <p>Rene Rendon, Uday M. Apte, and Aruna Apte <i>Naval Postgraduate School</i></p>

**Richard T. Ginman**—Mr. Richard T. Ginman assumed the position of director of defense procurement and acquisition policy (DPAP) in June 2011. In that capacity he is responsible for domestic, international, and contingency contract policy, acquisition policy and oversight of DoD 5000.1 and 5000.2, oversight of the DFARS and the DoD member of the FAR council, program development and implementation with regard to e-business, and, finally, oversight of the purchase card program. He also serves as co-leader and proponent of the pricing and contracting community within the DoD.

He assumed the position of DPAP in March 2010. In February 2008 he assumed the position of principal deputy to the director of DPAP. In that capacity, he is the principal advisor to the director for all contracting and procurement policy areas, including program acquisition strategies, incentives, program execution, peer reviews, contingency contracting, and acquisition policy.

Mr. Ginman has more than 37 years of experience in government and commercial business in the fields of contracting, acquisition management, logistics, and financial management. Among his previous assignments, he has been the vice president, Maritime Information Systems for General Dynamics Advanced Information Systems; director of contracts, Digital System Resources; commander, Navy Exchange Service Command; deputy for acquisition and business management for the assistant secretary of the Navy (RD&A); and deputy commander for contracts, Naval Sea Systems Command.

Throughout his career, Mr. Ginman has led large organizations with complex budget and fiscal challenges during periods of substantial change. In addition to the positions above Mr. Ginman's extensive work experience includes tours at the Naval Ordnance Systems Command; Naval Sea Systems Command; Naval Air Systems Command; Naval Regional Contracting Office, Long Beach; Long Beach Naval Shipyard; Office of the Secretary of Defense; and U.S. Embassy, Morocco. In addition he has served on USS *Puffer* (SSN 652), USS *Ranger* (CV 61), and USS *Hunley* (AS 31).

Mr. Ginman was commissioned an ensign in the Supply Corps, United States Navy in 1970 and retired as a rear admiral in 2000. He received a Bachelor of Arts degree from Williams College, a Master of Business Administration degree from George Washington University, and attended the University of Southern California's Executive Program in Business Administration. He has received



the Office of the Secretary of Defense Medal for Exceptional Civilian Service (2009, 2011). His personal military awards include the Defense Superior Service Medal, Legion of Merit, Defense Meritorious Service Medal, Meritorious Service Medal, and Navy Commendation Medal.

**Alan Chvotkin**—Chvotkin is one of the most knowledgeable and respected experts on federal acquisition policy, legislation, and regulation. At Professional Services Council (PSC), he is responsible for the association's legislative and regulatory policy affecting PSC's membership. Chvotkin is an active and founding member of the industry's Acquisition Reform Working Group, which was established in 1993.

In his early career, Chvotkin served as professional staff to the Senate Budget Committee and to the Senate Governmental Affairs Committee. He became counsel and staff director to the Senate Small Business Committee and then counsel to the Senate Armed Services Committee.

Prior to joining PSC, he was a vice president of AT&T Government Services, where he was responsible for managing key AT&T programs and opportunities. Earlier at AT&T, he was the vice president responsible for the government contracts, pricing, compliance, and proposal development organizations. From 1986 to 1995, he was corporate director of government relations and senior counsel at Sundstrand Corporation.

Chvotkin is a member of the Supreme Court, American, and District of Columbia Bar Associations. He is also a member of the National Contract Management Association and serves on its national board of advisors and as a fellow of the organization. Chvotkin is also a two-time "Fed 100" winner. He has a law degree from The American University's Washington College of Law, a master's degree in public administration and a bachelor's degree in political science.



# U.S. Department of Defense Services Contract Spending and the Supporting Industrial Base, 2000–2011

**David Berteau**—Mr. Berteau is senior vice president and director of the CSIS International Security Program, covering defense management, programs, contracting, and acquisition. His group also assesses national security economics and industry. Mr. Berteau is an adjunct professor at Georgetown University, a director of the Procurement Round Table, and a fellow of the National Academy of Public Administration and the Robert S. Strauss Center at the University of Texas. Prior to joining CSIS, he was director of national defense and homeland security for Clark & Weinstock, director of Syracuse University's National Security Studies Program, and a senior vice president at Science Applications International Corporation (SAIC). He served in the U.S. Defense Department under four defense secretaries, including four years as principal deputy assistant secretary of defense for production and logistics. Mr. Berteau graduated with a BA from Tulane University in 1971 and received his master's degree in 1981 from the LBJ School of Public Affairs at the University of Texas. [DBerteau@csis.org]

**Guy Ben-Ari**—Mr. Ben-Ari is the deputy director for Defense-Industrial Initiatives Group at the Center for Strategic International Studies. He works on projects related to the U.S. technology and industrial bases supporting defense. His current research efforts involve defense R&D policies, defense economics, and managing complex defense acquisition programs. Mr. Ben-Ari holds a bachelor's degree in political science from Tel Aviv University, a master's degree in international science and technology policy from the George Washington University, and is currently a PhD candidate (ABD) at the George Washington University.

**Greg Sanders**—Mr. Sanders is a fellow with the Defense-Industrial Initiatives Group at CSIS. He gathers and analyzes data on U.S. defense acquisition and contract spending as international defense budgetary and trade trends. He has also studied data visualization and ways to use complex data collections to create succinct and innovative tables, charts, and maps. Mr. Sanders holds an MA in international relations from the University of Denver and a BA in government and politics as well as a BS in computer science from the University of Maryland.

**David Morrow**—Mr. Morrow is a research associate with the Defense-Industrial Initiatives Group at CSIS, where he focuses on federal professional services contracting, U.S. naval shipbuilding, and private security contracting. Previously, Mr. Morrow interned at the U.S. Department of State's Office of European Security and Political Affairs and at the U.S.-Russia Business Council. He holds a BA in international affairs from James Madison University and an MA in European and Eurasian studies from the George Washington University.

**Jesse Ellman**—Mr. Ellman is a research associate with the Defense-Industrial Initiatives Group at the CSIS. He specializes in U.S. defense acquisition issues, with a particular focus on recent U.S. Army modernization efforts. He holds a BA in political science from Stony Brook University and an MA with honors in security studies, with a concentration in military operations, from Georgetown University.

## Abstract

The first goal of this research is to analyze trends in DoD services contract actions between 1990–2011 for the DoD overall and for individual DoD components (Army, Navy, Air Force, and “other”); by area of defense service contract action; and by level of competition, type of contract, and type of funding mechanism. The second goal is analyze the composition of the industrial base supporting DoD service contracts by using a breakdown of the defense services industrial base into small, medium, and large companies and by identifying the top 20 defense services companies (by total dollars obligated) for the DoD overall and for each DoD component (Army, Navy, Air Force, and “other”). This annotated brief presents the preliminary findings of this research, and covers only the years of 2000–2011 for the DoD overall.





## Introduction

<div><div>   CENTER FOR STRATEGIC &amp; INTERNATIONAL STUDIES   Defense-Industrial Initiatives Group</div></div>
<h3>Research goals</h3> <ul style="list-style-type: none"><li>• <b>Analyze trends in DoD services contract actions between 1990 and 2011</b><ul style="list-style-type: none"><li>• For DoD overall and for individual DoD Components (Army, Navy, Air Force, and “Other”)</li><li>• By area of defense service contract action</li><li>• By level of competition, type of contract, and type of funding mechanism</li></ul></li><li>• <b>Analyze the composition of the industrial base supporting DoD service contracts</b><ul style="list-style-type: none"><li>• Breakdown of defense services industrial base into small, medium and large companies</li><li>• Identification of Top 20 defense services companies (by total dollars obligated) for DoD overall and for each DoD Component (Army, Navy, Air Force, and “Other”)</li></ul></li><li>• <b>This annotated brief presents the preliminary findings of this research, and covers only the years 2000-2011 for DoD overall</b></li></ul>

**Figure 1. Research Goals**

Spending by the Department of Defense (DoD) on services contracts, which range from clerical and administrative work to vehicle maintenance to research and development (R&D), has been largely neglected by past studies of DoD spending trends. Yet DoD spending on services contract actions amounted to just under \$200 billion in 2011, more than 50% of total DoD contract spending and nearly a third of the entire DoD budget. Both the executive branch and Congress have implemented policies to improve acquisitions of services, but the impacts of their efforts remain uncertain without a clear, concise analysis of past spending. The then–Under Secretary of Defense for Acquisition, Technology, and Logistics (USD[AT&L]; 2011) Dr. Ashton Carter has stated, “Most of our services acquires, unlike weapons-system acquires, are amateurs. ... I intend to help them get better at it.”

The goal of this project is to provide policymakers with an in-depth analysis of trends in DoD spending on services contract actions and the companies that provided them from 1990 to 2011. Using the Federal Procurement Data System (FPDS) and other sources, we present data on overall DoD services contract spending and on specific service areas. We then analyze the data by degree of competition, contract vehicle type, DoD component, contractor identity, and so forth, and by DoD component (Army, Navy, Air Force, and “other”). A set of recommendations for policymakers are then developed and vetted with a panel of government, industry, and academia experts.



### Data sources

- **The Federal Procurement Data System (FPDS) is the primary data source for this project, supplemented with the Bloomberg government contract database and verified with the USASpending.gov query tool**
- **FPDS includes only unclassified DoD prime contract actions worth over \$2,500 (\$25,000 for the years prior to 2005); for DoD, this amounted to over 3 million contract actions for 1990-2011**
- **Contract action classifications sometimes differ between FPDS and individual companies, resulting in some contract actions that a company considers as services being labeled as products by FPDS and vice versa**
- **Neither supplementals nor joint ventures are separately classified in FPDS**
- **All dollar figures are in constant 2011 dollars**

**Figure 2. Data Sources**

The main source of data for this project is the Federal Procurement Data System (FPDS), the official clearinghouse of federal government contracting data. This database includes, among other data, all unclassified DoD prime contract actions worth over \$2,500 (\$25,000 for the years prior to 2005). For each contract action, the FPDS includes over 200 fields of data. Using both the FPDS query tool and the USASpending.gov query function, the Center for Strategic and International Studies (CSIS) identified and downloaded all DoD services contract actions for the period of 1990–2011. This amounts to over 3 million contract actions over the last 12 years. We then imported the data into a custom-built Microsoft Access database that included only fields that were relevant for our research, amounting to 56 fields that include the main categories for analysis in this report.

In addition to downloading the data, the CSIS research team undertook a rigorous process to verify and improve the accuracy and quality of the data. The research team ran trial queries to detect patterns of blank, incomplete, or improperly entered data. Data was also checked against the Bloomberg government contracting database to ensure overall accuracy, and against the DoD's DD 350 Individual Contracting Action Reports to verify accuracy for certain large contracts.

### Methodology

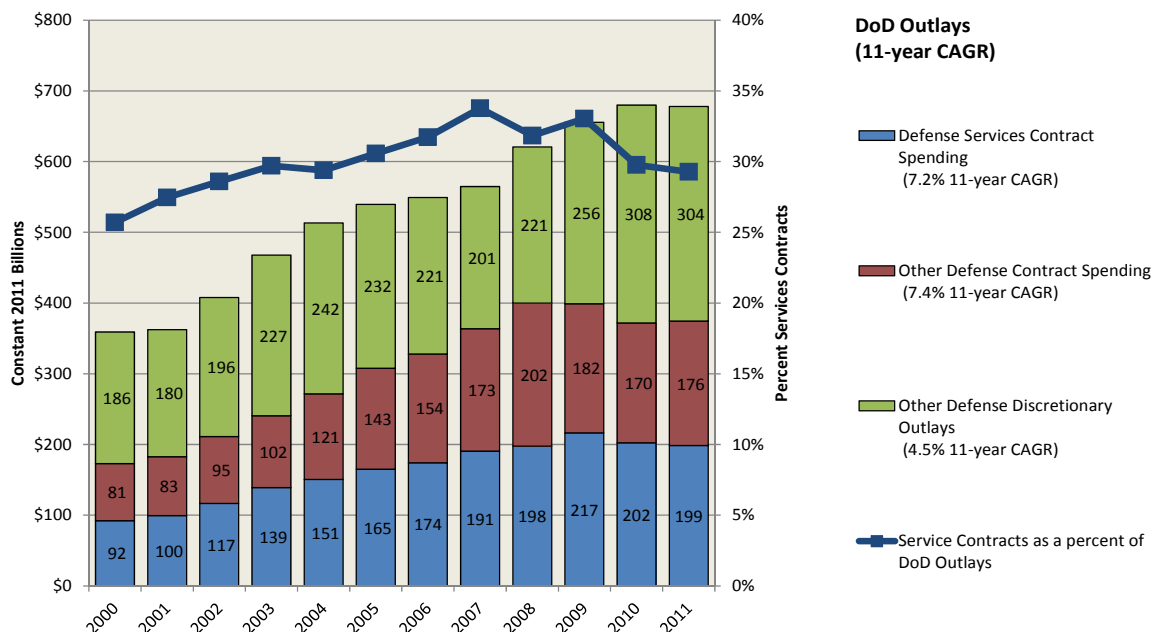
- **Six categories of services serve as the foundation for this analysis:**
  - Information and communications technology (ICT) services
  - Professional, administrative, management services (PAMS)
  - Research & development (R&D)
  - Equipment-related services (ERS)
  - Facility-related services & construction (FRS&C) services
  - Medical services
- **These categories cover all FPDS service codes**
- **The categories are closely aligned with - but do not fully overlap – the DoD services categories**

### Figure 3. Methodology

In order to show broader trends among similar activities with overlapping industrial bases, the CSIS created six service categories. Each category consists of several FPDS service codes and represents a broad area of service activity. The six categories and their respective FPDS service codes are as follows:

- information and communications technology (ICT) services: all of service codes D and L, and elements of service codes H, J, K, N, S, and W;
- professional, administrative, management services (PAMS): all of service codes B, C, R, T, and U, and elements of service codes A, H, and V;
- research & development (R&D): elements of service code A;
- equipment-related services (ERS): elements of service codes J, K, N, P, V, and W;
- facility-related services and construction (FRS&C) services: all of service codes E, F, M, X, Y, and Z, and elements of service code P and S; and
- medical services: all of service codes G and Q.

Although these buckets correspond to similarly titled DoD “portfolio groups,” the CSIS selected their contents from FPDS service codes determined to be germane to each bucket’s title, thereby forming narrower definitions of each service category. This addresses a Defense Science Board (2011) criticism that the DoD portfolio groups “inappropriately” combine disparate service codes under the same title (such as those for routine education and training with those for expeditionary logistics management under “knowledge-based services”; p. 6).



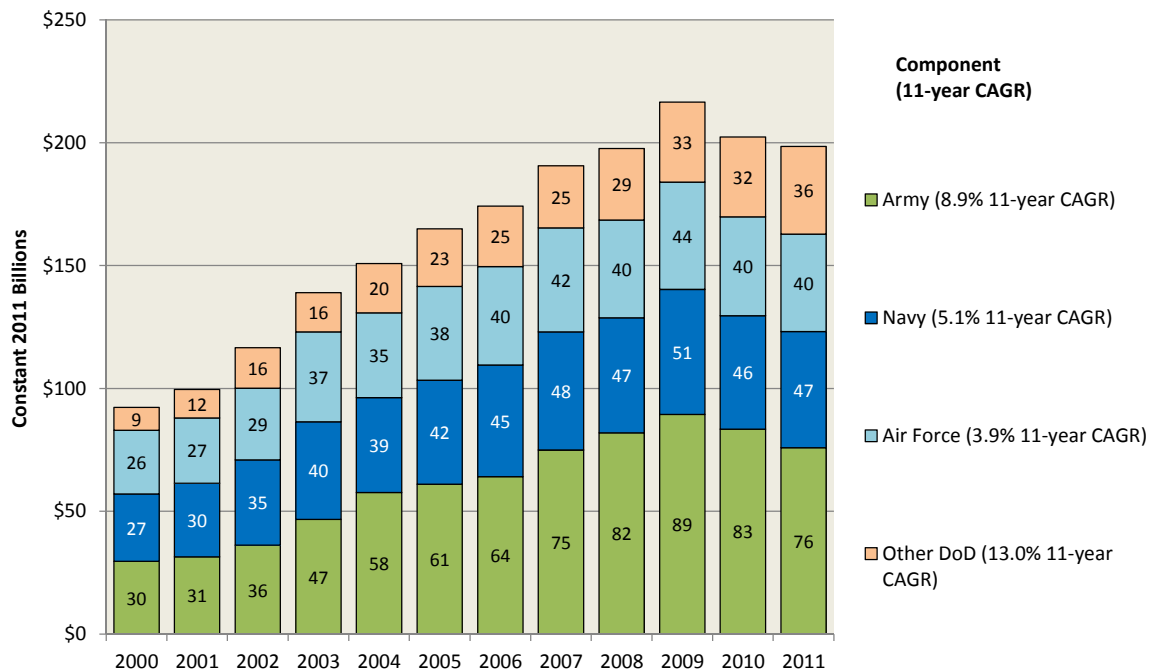
**Figure 4. Top-Line DoD Service Contract Spending, 2000–2011**

*Note.* The information for this figure was taken from FPDS, the Bloomberg government contract database, and OMB Historical Tables; analysis was done by CSIS Defense-Industrial Initiatives Group.

In 2011, DoD spending on service contract actions totaled \$198 billion, accounting for slightly under 30% of total DoD outlays and 56% of total DoD contract spending for the year (up from 50% year before and 48% in 2000).

During the 12-year period observed, DoD services contract spending increased at an compound annual growth rate (CAGR) of 7.2%, which is just below the 7.4% 11-year CAGR exhibited by all other defense contract spending (which covers primarily DoD contracting for products).

Interestingly, during the recent years of defense drawdowns, DoD services contract spending between 2008 and 2011 decreased by some \$18 billion (a 9% decline) while spending on products decreased by \$26 billion (almost 13%).



**Figure 5. Defense Service Contract Spending by Component, 2000–2011**

*Note.* The information for this figure was taken from FPDS; analysis was done by CSIS Defense-Industrial Initiatives Group.

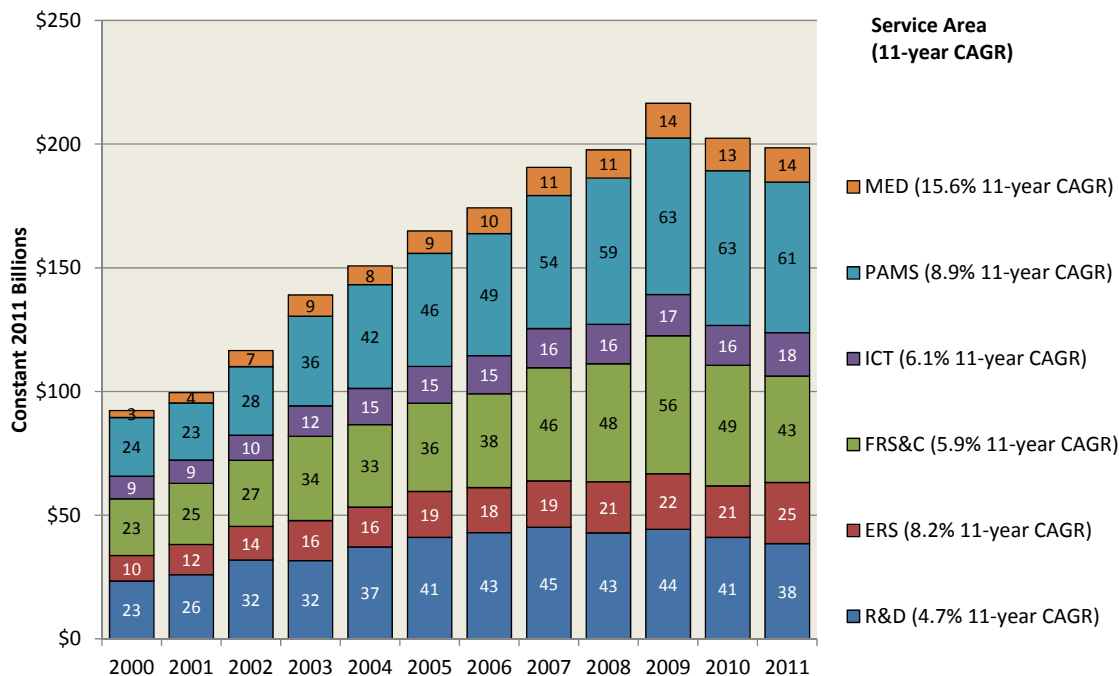
Spending on services across the various DoD components grew at a rapid pace after 9/11, driven primarily by operations in Afghanistan and Iraq. However, this growth has not been even across the various DoD components.

For much of the past decade, the Army was the primary driver of growth in the DoD's service contract spending, increasing at an average of 8.9% per year for the period. After reaching a peak of \$89 billion in 2009, Army service contract spending decreased substantially to \$76 billion in 2011, largely as a result of the U.S. force drawdown in Iraq. For the past three years, the Army's spending on service contracts has *declined* by 2.5% per year.

Growth in Air Force service contract spending was more moderate, increasing at an 11-year CAGR of 3.9% and hovering around \$40 billion each year since 2006.

Growth in Navy service contract spending was also slow relative to the Army's, growing at a 5.1% 11-year CAGR, from \$27 billion in 2000 to \$51 billion in 2009. Yet, as with all DoD components, Navy spending decreased after 2009, from \$51 billion to \$47 billion, and, like the Air Force, Navy spending on services contracts has seen limited growth since 2006.

The highest growth rate in spending on services occurred in the "other" category, which increased at a 13% CAGR, from \$9 billion to \$36 billion between 2000 and 2011. Furthermore, unlike the key military departments, the "other" category continued to grow after 2009, from \$32 billion in 2010 to \$36 billion in 2011. (It should be noted that the main elements of the "other" category are the Defense Logistics Agency and the Missile Defense Agency.)



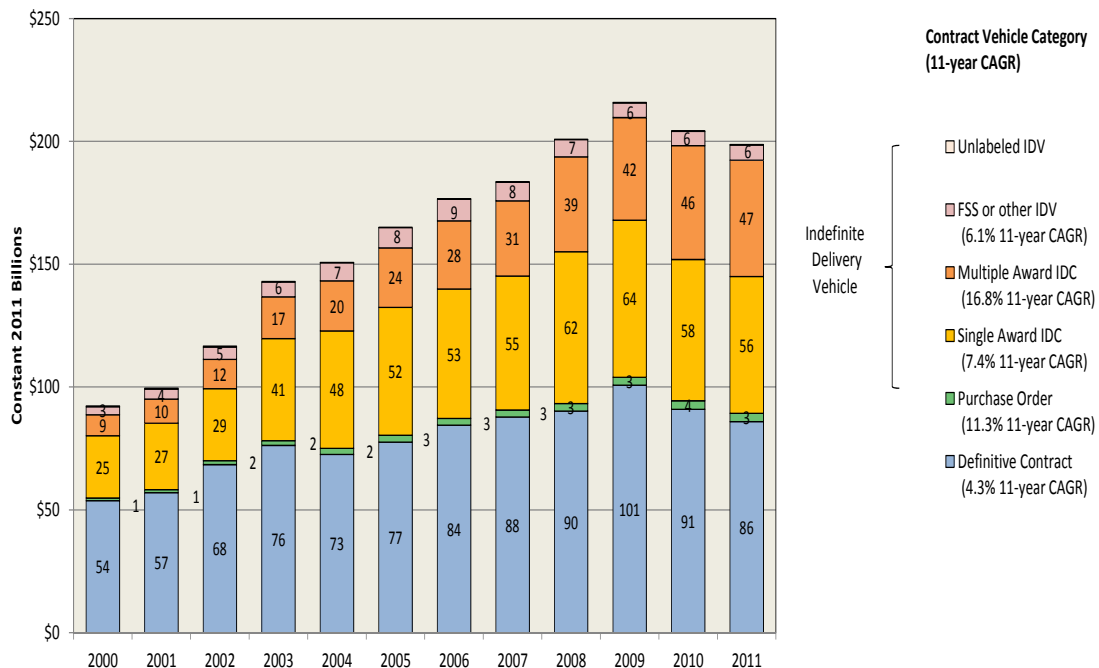
**Figure 6. Defense Service Contract Spending by Service Area, 2000–2011**

*Note.* The information for this figure was taken from FPDS; analysis was done by CSIS Defense-Industrial Initiatives Group.

From 2000 to 2011, with record defense budgets and high operational tempo in Iraq and Afghanistan, all service categories experienced growth. MED had the highest growth at almost 16 % per year on average, followed by PAMS and ERS with 8.9 and 8.2%, respectively. MED grew its share of total DoD service contracts from 3% in 2000 to 7% in 2011, while PAMS grew from 26% to 30.6%. The only other service category that saw its share of overall service contracts increase was ERS, which grew from 10.8% in 2000 to 12.5% in 2011. However, the three largest categories in terms of total dollars spent remained PAMS, FRS&C, and R&D. For the 12-year period, R&D saw the slowest growth (4.7% CAGR) of any service area, though it should be noted that contract actions awarded for classified R&D are not included in the FPDS data.

As defense spending overall began decreasing in 2009, the biggest cuts in DoD service contracts occurred in FRS&C, which fell from \$55.7 billion in 2009 to \$43 billion in 2011, largely due to reduced demand for base construction and maintenance in support of operations in Iraq. The second largest decrease in contract service spending by category was in R&D, which declined from \$44 billion in 2009 to \$38 billion in 2011.

Despite the decline in overall DoD services contract spending in recent years, spending on ERS, ICT, and MED increased in 2011. The largest of these increases occurred in ERS, which grew from \$20.8 billion in 2010 to \$24.7 billion in 2011. This growth can be attributed to higher demand for services to repair and upgrade equipment returned from Iraq and Afghanistan, in anticipation of funds not being made available for acquiring new hardware. ICT grew from \$16.1 billion to \$17.6 billion and MED grew from \$13 billion to \$14 billion.



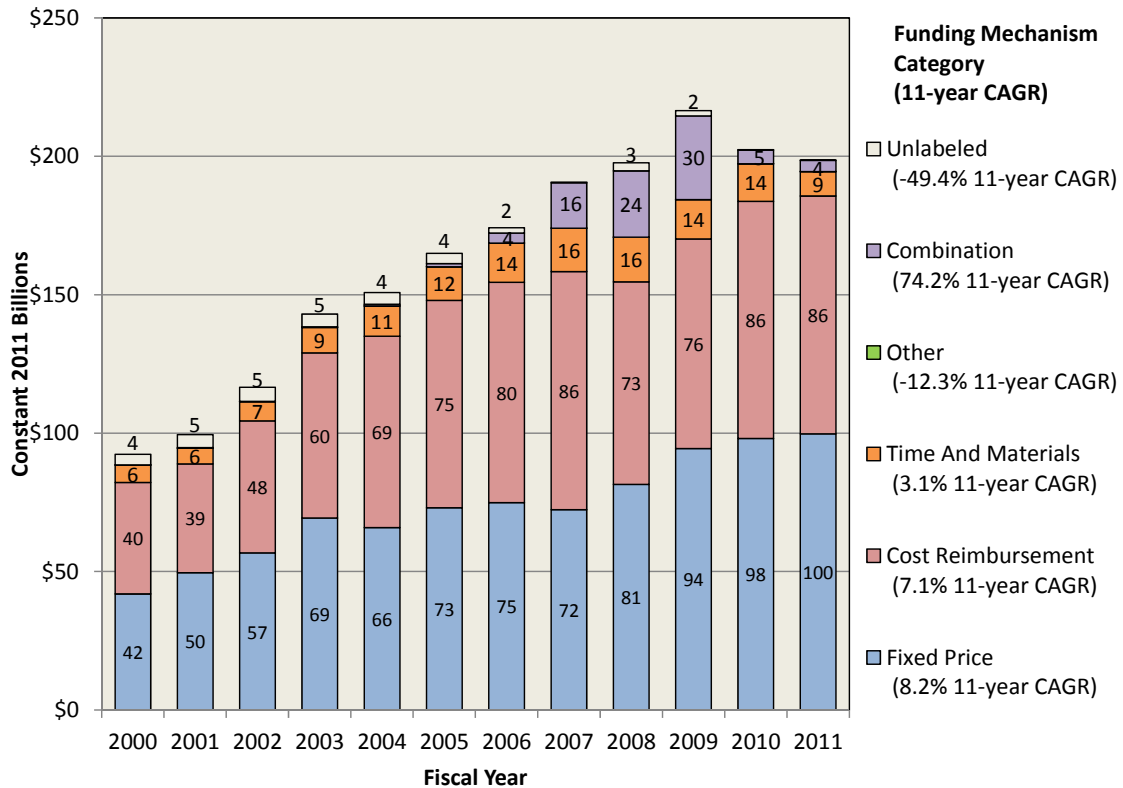
**Figure 7. Defense Service Contract Spending by Contract Vehicle, 2000–2011**

*Note.* Total numbers do not match with those in other slides due to use of the FPDS.gov web tool as the source for this slide. Regular updates by FPDS administrators can change back year totals. The information for this figure was taken from the FPDS webtool; analysis was done by CSIS Defense-Industrial Initiatives Group.

From 2000 to 2011, DoD services contract dollars awarded through definitive contract vehicles grew at a 4.3% 11-year CAGR, from \$54 billion in 2000 to \$85.8 billion in 2011. In parallel, dollars awarded through all IDVs collectively (FSS, purchase order, multiple award, single award, and unlabeled IDVs) grew more than twice as quickly at a 10.2% 11-year CAGR, from \$37.5 billion in 2000 to \$109.4 billion in 2011. As a proportion of DoD contract dollars spent on services, those carried through definitive contracts declined from 58% in 2000 to 43% in 2011.

Much of the growth in IDVs over the last 12 years has been in the multiple-award IDV subcategory. Contract dollars delivered through this vehicle grew from just \$9 billion in 2000 to \$47 billion in 2011 at an 11-year CAGR of 16.8%. Despite the decline in DoD contract spending over the last two years, the multiple-award IDV subcategory has actually grown in value, from \$42 billion in 2009 to \$47 billion in 2011. Meanwhile, single-award IDVs have declined over the past two years observed, from \$64 billion in 2009 to \$56 billion in 2011. Yet, for the entire period observed, the single award IDV subcategory held a 7.4% 11-year CAGR, due to strong growth during the first nine years of the decade.





**Figure 8. Defense Service Contract Spending by Funding Mechanism, 2000–2011**

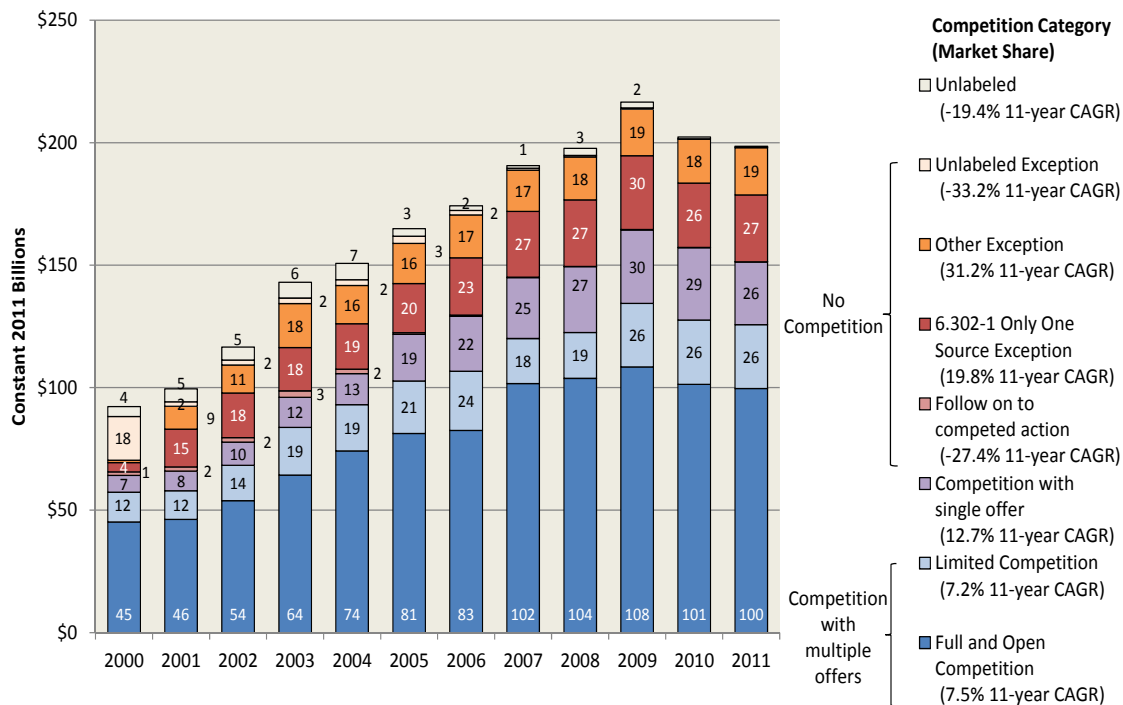
*Note.* The information for this figure was taken from FPDS; analysis was done by CSIS Defense-Industrial Initiatives Group.

Between 2010 and 2011, there was a shift away from the use of time and materials funding mechanisms, an increase in the use of fixed-price contracts, and no change in the use of cost reimbursement funding mechanisms.

Likely as a result of reduced DoD spending on FRS&C contracts, which are more likely to use time and materials as an incentive due to the materials-intensive nature of construction work and the time used on facilities maintenance, dollars spent on time and materials decreased from \$6 billion (6.5% of total service contract actions) in 2000 to \$8.9 (4.5% of total service contract actions) in 2011. The percentage of DoD services contract dollars funded through fixed-price contracts increased from \$42 billion in 2000 (45.6%) to \$100 billion in 2011 (50.2%). The value of reimbursement contract actions remained constant at 43% of total DoD services contract dollars.

Combination funding mechanisms, which pose a problem for accountability and transparency because they obscure how many contract dollars were awarded in each category, saw a brief but sudden rise between 2006 and 2009, from \$4 billion to \$30 billion. However, this category then sharply dropped to \$5 billion in 2010 and further decreased to \$4 billion by 2011. Similarly, the data show that unlabeled contract funding mechanisms, which pose a similar problem for contracting oversight as that posed by combination mechanisms, have all but disappeared in the last two years.





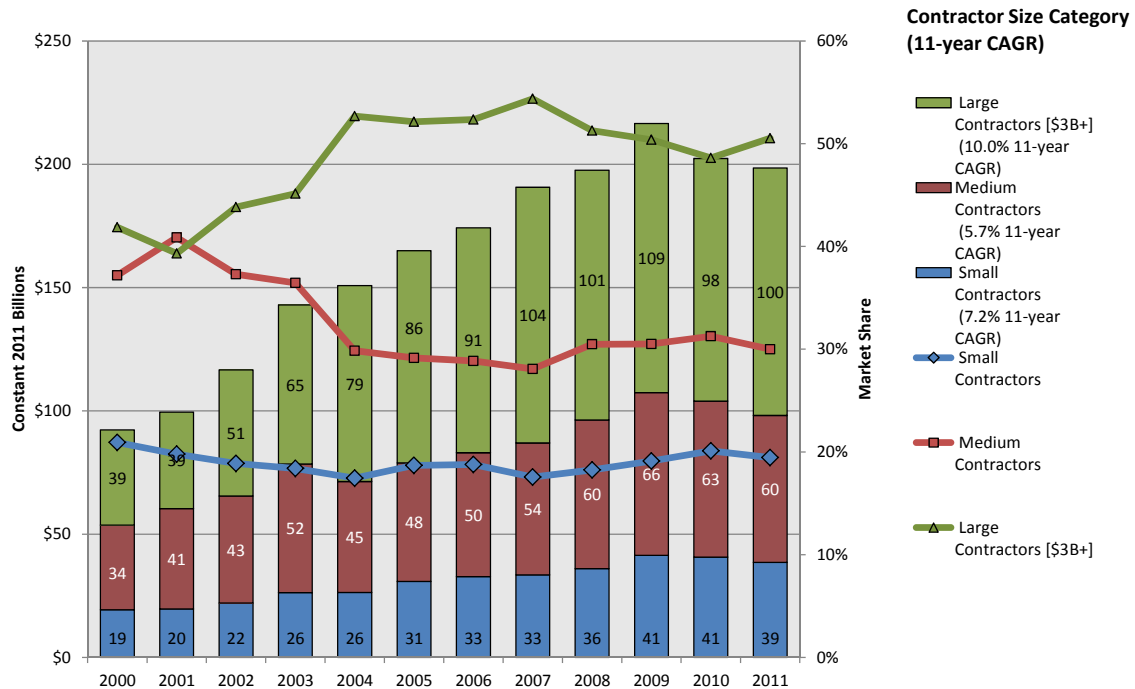
**Figure 9. Defense Service Contract Spending by Level of Competition, 2000–2011**

*Note.* The information for this figure was taken from FPDS; analysis was done by CSIS Defense-Industrial Initiatives Group.

Overall, the DoD’s efforts to encourage more competition has had mixed results. Between 2000 and 2010, the DoD increased the level of competition in service contract actions only slightly. During this period, the share of service contracts that were competed and received multiple offers rose from 63% in 2000 to 64% in 2010, and the share service contract actions that were not competed or received only a single offer dropped from 37% in 2000 to 36% in 2010. However, the overall share of competed contract actions (i.e., those in the categories of “full and open competition,” “limited competition,” and “competition with single offer”) rose at a faster pace, from 70% in 2000 to 78% in 2010.

Over the past year, however, total DoD contract dollars awarded on the basis of competition decreased while the value of contract actions awarded noncompetitively increased. As a result, competitively awarded contract dollars declined as a percentage of total DoD service contract dollars spent, from 78% to 76.2%, while noncompetitively awarded contract dollars increased from 22% to 23.6% of total service contract spending. This rise in non-competed contract dollars is slightly more concerning than in other instances when non-competed contract dollars rose, as 2010–2011 was the first time that competed contract dollars decreased as non-competed contract dollars actually increased year-on-year.

A note regarding methodology, in contrast to recent GAO reports on competition in DoD services contracts, the CSIS does not include the “fair opportunity/limited sources” variable when determining extent of competition. Also in contrast to the GAO, the CSIS does differentiate between contracts receiving multiple bids or single bids in competition.



**Figure 10. Defense Service Contract Spending by Contractor Size, 2000–2011**

*Note.* The information for this figure was taken from FPDS and the Bloomberg government contract database; analysis was done by CSIS Defense-Industrial Initiatives Group.

For the entire period observed (2000 to 2011), large contractors had the highest growth rate with an 11-year CAGR of 10%. The second highest growth rate was for small contractors, with a 7.2% 11-year CAGR. Medium-sized contractors experienced the lowest growth rate, with an 11-year CAGR of 5.7%. Large contractors nearly tripled their market value from \$39 billion in 2000 to \$100 billion in 2011, while medium-sized contractors and small contractors nearly doubled their market values from \$34 billion to \$60 billion and from \$19 billion to \$39 billion, respectively.

In terms of market share, large contractors increased theirs from 42.4% in 2000 to 50.2% in 2011, medium-sized contractors dropped from 37% in 2000 to 30.1% in 2011, and small contractors remained relatively steady (20.6% in 2000 versus 19.6% in 2011). The “mid-tier squeeze” is therefore quite evident in DoD services contracting. Interestingly, a CSIS analysis of all federal government service contract actions shows that the “mid-tier squeeze” ended in 2007, and medium-sized companies have since then regained some of their market share (though they are not yet back to 2000 levels). Large companies therefore appear to be doing better in the DoD services market than in the civilian government services.

Rank	2000 Contractors	2000	2011 Contractors	2011
	Top 20 Contractors in 2000	Obligations in 2011 Millions	Top 20 Contractors in 2011	Obligations in 2011 Millions
1	Lockheed Martin	\$ 8,111	Lockheed Martin	\$ 13,590
2	Boeing	\$ 4,665	Northrop Grumman	\$ 8,459
3	Raytheon	\$ 3,082	Boeing	\$ 6,018
4	TRW [Northrop Grumman]	\$ 2,104	Raytheon	\$ 5,567
5	Northrop Grumman	\$ 1,857	SAIC	\$ 4,730
<b>Subtotal for Top 5</b>		<b>19,818</b>		<b>38,364</b>
6	General Dynamics	\$ 1,724	General Dynamics	\$ 4,038
7	SAIC	\$ 1,680	L3 Communications	\$ 3,635
8	Computer Sciences Corp.	\$ 1,451	Humana	\$ 3,439
9	Bechtel	\$ 839	TriWest Healthcare	\$ 3,093
10	Halliburton	\$ 753	Health Net	\$ 2,963
11	Foundation Health Federal Services	\$ 643	ITT	\$ 2,945
12	Litton [Northrop Grumman]	\$ 606	Computer Sciences Corp.	\$ 2,926
13	DynCorp International	\$ 604	BAE Systems	\$ 2,891
14	BAE Systems	\$ 587	DynCorp International	\$ 2,861
15	ITT	\$ 587	Fluor	\$ 2,722
16	Newport News Shipbuilding [Northrop Grumman]	\$ 582	Booz Allen Hamilton	\$ 2,543
17	FedEx	\$ 562	KBR	\$ 2,250
18	Johns Hopkins University	\$ 539	CACI	\$ 2,219
19	The Mitre	\$ 523	URS	\$ 1,754
20	Booz Allen Hamilton	\$ 514	Hewlett-Packard	\$ 1,750
<b>Total for Top 20</b>		<b>\$ 32,012</b>		<b>\$ 80,395</b>
<b>Total for all industry</b>		<b>92,304</b>		<b>198,536</b>

**Figure 11. Top 20 Defense Services Contractors, 2000–2011**

*Note.* The information for this figure was taken from FPDS and the Bloomberg government contract database; analysis was done by CSIS Defense-Industrial Initiatives Group.

To analyze the composition of the DoD service contractor industrial base, the CSIS investigated every Dun & Bradstreet Data Universal Numbering System (DUNS) number representing entities awarded \$250 million or more in a given year. Using the Defense Logistics Agency's Business Identification Number Cross-reference System (BINCS), as well as information from Bloomberg and web searches, each DUNS number was associated with the respective parent entity (company, university, or joint venture; this association is *not* provided in the FPDS data). The CSIS also researched all the mergers and acquisitions by defense contractors, as well as joint ventures among DoD service contractors, to ensure that obligated dollars were being assigned to the correct parent companies.

The makeup of the top seven defense service contractors has been stable, with the only differences between 2000 and 2011 being the disappearance of TRW (acquired by Northrop Grumman) and the entry of L3 into seventh place in 2011. However, there has been a more significant upheaval within the rest of the top 20, with eight of the remaining contractors in 2011 being newcomers compared to 2000. Healthcare service providers account for three of these new firms: Humana, TriWest Healthcare, and Health Net. The impact of mergers and acquisitions is also evident, as three of the top 20 contractors in 2000 were later acquired by Northrop Grumman: TRW, Litton, and Newport News Shipbuilding.

Overall, the top five contractors' share of the market has declined from 21% in 2000 to 19% in 2011, while the share held by the top 20 has increased from 35% in 2000 to 40% in 2011.

- H (quality control, testing, and inspection services): primarily attributed to PAMS; exceptions are quality control, testing, and inspection services for ICT systems: communication equipment, fiber optics, and automated data processing equipment and supplies (classified as ICT).



- J (maintenance, repair, and rebuilding of equipment): primarily attributed to ERS; exceptions are maintenance, repair, and rebuilding services for ICT systems: communication equipment, fiber optics materials and components, and automated data processing equipment and supplies (classified as ICT).
- K (modification of equipment): primarily attributed to ERS; exceptions are modification services for ICT systems: communication equipment, fiber optics materials, and automated data processing equipment and supplies (classified as ICT).
- N (installation of equipment): primarily attributed to ERS; exceptions are installation services for ICT systems: communication equipment, fiber optics materials, and automated data processing equipment and supplies (classified as ICT).
- P (salvage services): demolition of buildings, structures, and facilities classified as FRS&C; disposal of surplus property, salvage of aircraft and marine vessels, as well as other salvage services (classified as ERS).
- S (utilities and housekeeping services): primarily attributed to FRS&C; exception is utility services for telephones and/or communications (classified as ICT).
- V (transportation, travel, and relocation services): freight and other transport services for things (listed under the V1\*\* codes) classified as ERS; transport services for passengers (including ambulances, taxicabs, recruitment, lodging, navigational aid and pilotage service, listed under the V2\*\* codes) relocation and travel agent services (listed under V3\*\* codes) and “other listed under V999 code) classified as PAMS.
- W (lease or rental of equipment): primarily attributed to ERS; exceptions are lease and rental services for ICT systems: communication equipment, fiber optics materials, and automated data processing equipment and supplies (classified as ICT).

## References

Defense Science Board. (2011, March). *Report of the Defense Science Board Task Force on Improvements to Service Contracting*. Washington, DC: OSD.

USD(AT&L). (2011, April 20). Speech at the Heritage Foundation.



## Appendix: Breakdown of CSIS Service Areas

### Appendix 1: Breakdown of CSIS Service Areas

- **Information and communications technology (ICT) services:** All of service codes D (Automatic data processing and telecommunication services) and L (Technical representative services), and elements of service codes H (Quality control, testing, and inspection services), J (Maintenance, repair, and rebuilding of equipment), K (Modification of equipment), N (Installation of equipment), S (Utilities and housekeeping services), and W (Lease or rental of equipment).
- **Professional, administrative, management services (PAMS):** All of service codes B (Special studies and analyses (not research and development), C (Architect and engineering services—construction), R, T, and U (Education and training services), and elements of service codes A (Research and development), H (Quality control, testing, and inspection services), and V (Transportation, travel, and relocation services).
- **Research & development (R&D):** Elements of service code A (Research and development).
- **Equipment-related services (ERS):** Elements of service codes J (Maintenance, repair, and rebuilding of equipment), K (Modification of equipment), N (Installation of equipment), P (Salvage services), V (Transportation, travel, and relocation services), and W (Lease or rental of equipment).
- **Facility-Related Services & Construction (FRS&C) services:** All of service codes E (Purchase of structures and facilities), F (Natural resources management), M (Operation of government-owned facility), X (Lease or rental of facilities), Y (Construction of structures and facilities), and Z (Maintenance, repair, or alteration of real property), and elements of service codes S (Utilities and housekeeping services) and P (Salvage services), .
- **Medical services:** All of service codes G (Social services) and Q (Medical services).



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# **U.S. Department of Defense Services Contract Spending and the Supporting Industrial Base, 2000-2011**

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and Jesse Ellman**

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**May 17, 2012**

## Research goals

- **Analyze trends in DoD services contract actions between 1990 and 2011**
  - For DoD overall and for individual DoD Components (Army, Navy, Air Force, and “Other”)
  - By area of defense service contract action
  - By level of competition, type of contract, and type of funding mechanism
- **Analyze the composition of the industrial base supporting DoD service contracts**
  - Breakdown of defense services industrial base into small, medium and large companies
  - Identification of Top 20 defense services companies (by total dollars obligated) for DoD overall and for each DoD Component (Army, Navy, Air Force, and “Other”)
- **This annotated brief presents the preliminary findings of this research, and covers only the years 2000-2011 for DoD overall**



## Data sources

- **The Federal Procurement Data System (FPDS) is the primary data source for this project, supplemented with the Bloomberg government contract database and verified with the USASpending.gov query tool**
- **FPDS includes only unclassified DoD prime contract actions worth over \$2,500 (\$25,000 for the years prior to 2005); for DoD, this amounted to over 3 million contract actions for 1990-2011**
- **Contract action classifications sometimes differ between FPDS and individual companies, resulting in some contract actions that a company considers as services being labeled as products by FPDS and vice versa**
- **Neither supplementals nor joint ventures are separately classified in FPDS**
- **All dollar figures are in constant 2011 dollars**

## Methodology

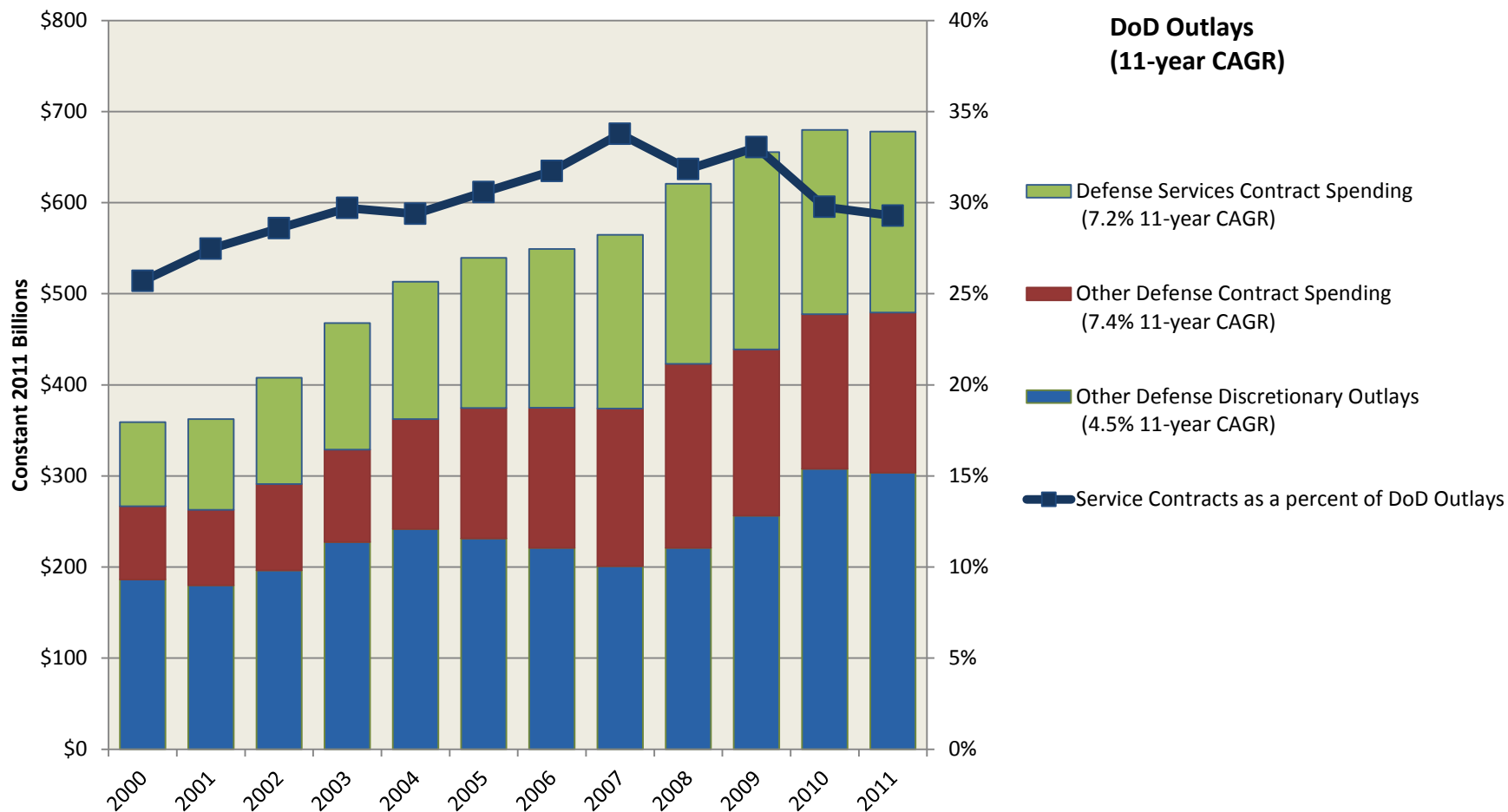
- **Demand side:**

- Six categories of services serve as the foundation for this analysis:
  - o Information and communications technology (ICT) services
  - o Professional, administrative, management services (PAMS)
  - o Research & development (R&D)
  - o Equipment-related services (ERS)
  - o Facility-related services & construction (FRS&C) services
  - o Medical services
- These categories cover all FPDS service codes
- The categories are closely aligned with - but do not fully overlap – DoD's services categories

- **Supply side:**

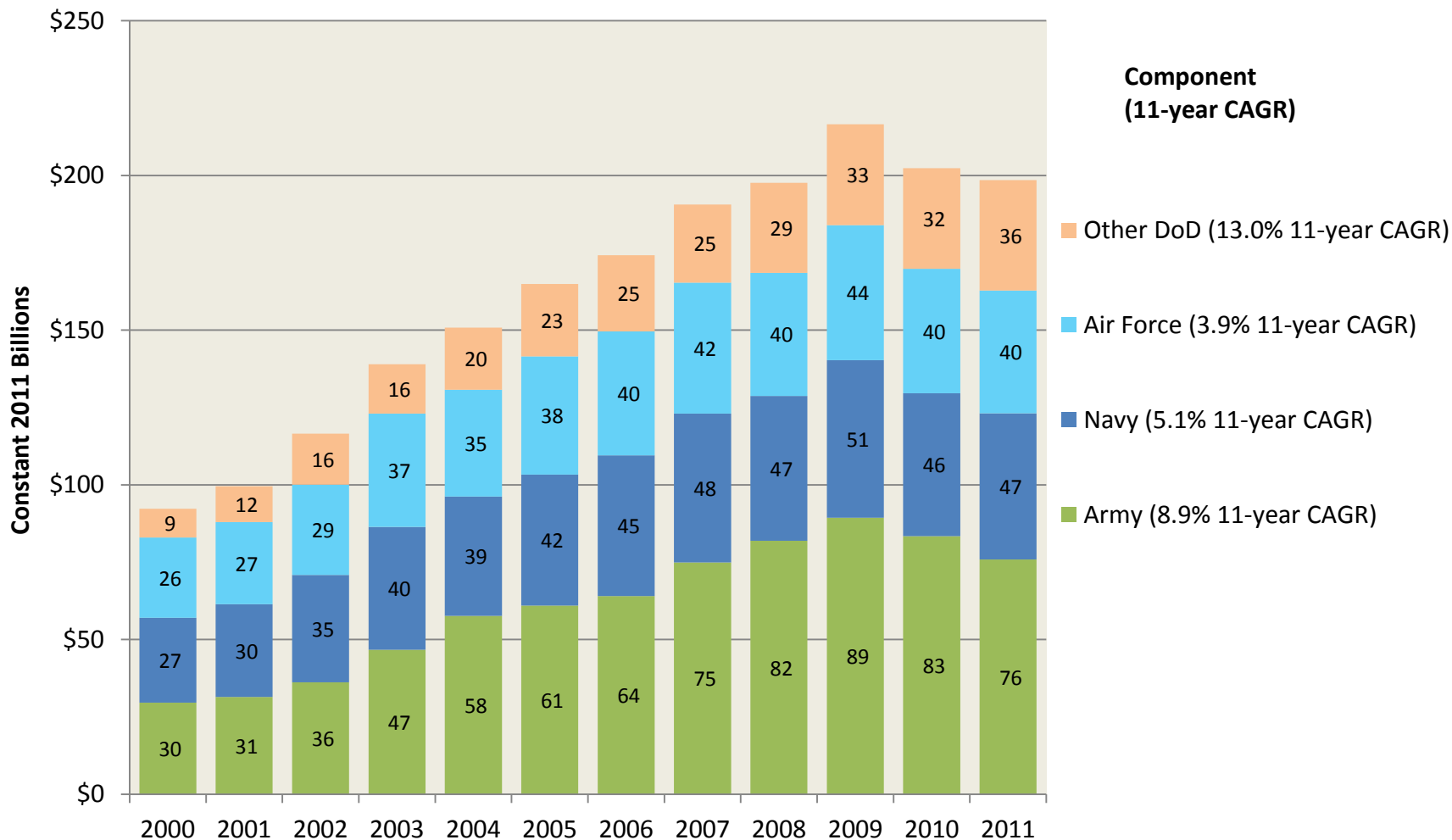
- Four size categories for companies:
  - o Big 6: Lockheed Martin, Northrop Grumman, Boeing, General Dynamics, Raytheon, BAE
  - o Large: >\$3 billion in total annual revenue (excluding Big 6)
  - o Small: identified as such in FPDS (based on SBA guidelines)
  - o Medium: not identified as "small" and <\$3 billion in total annual revenue

## DoD Service Contract Spending in Context, 2000-2011

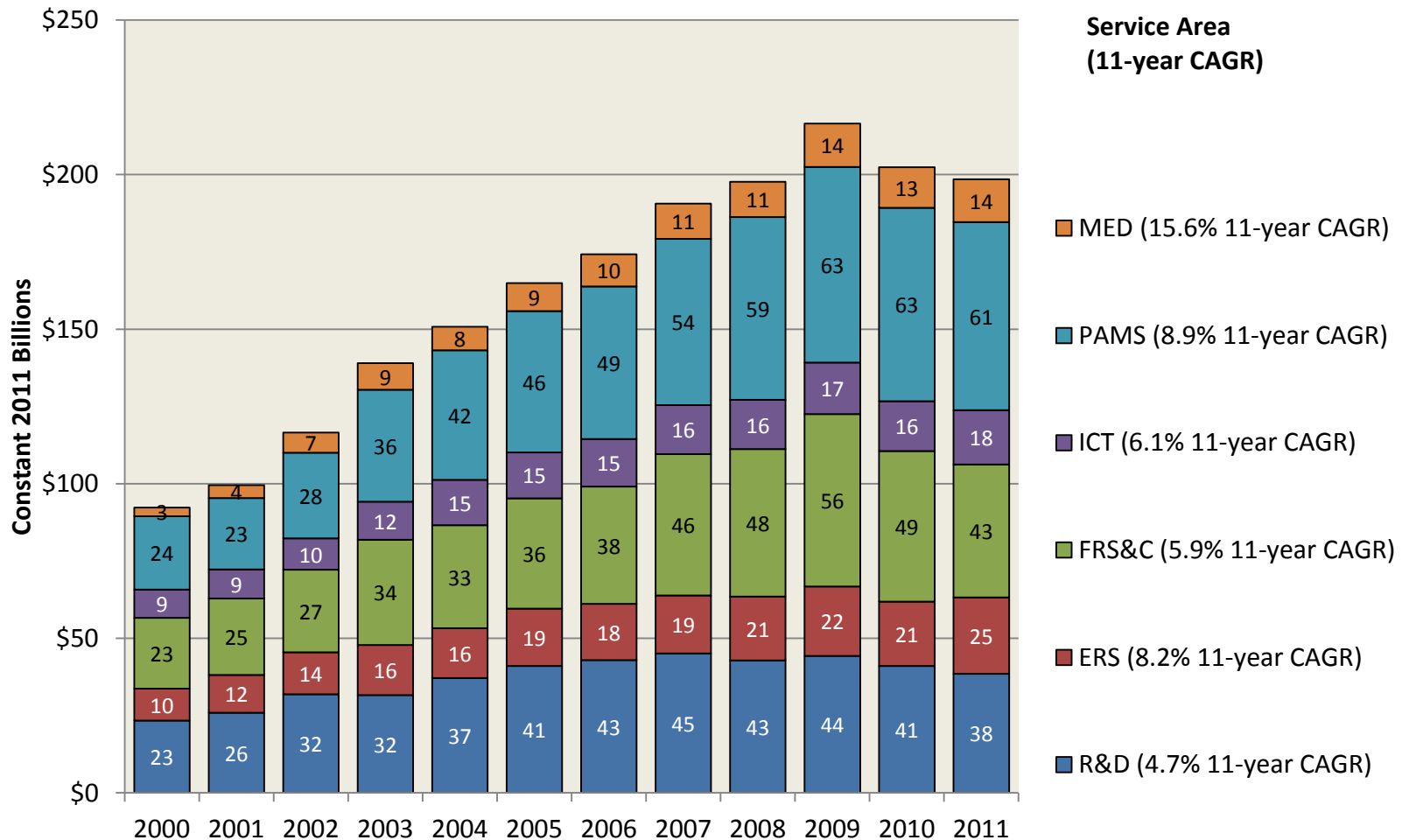


Sources: FPDS, Bloomberg government contract database, OMB Historical Tables,; analysis by CSIS Defense-Industrial Initiatives Group

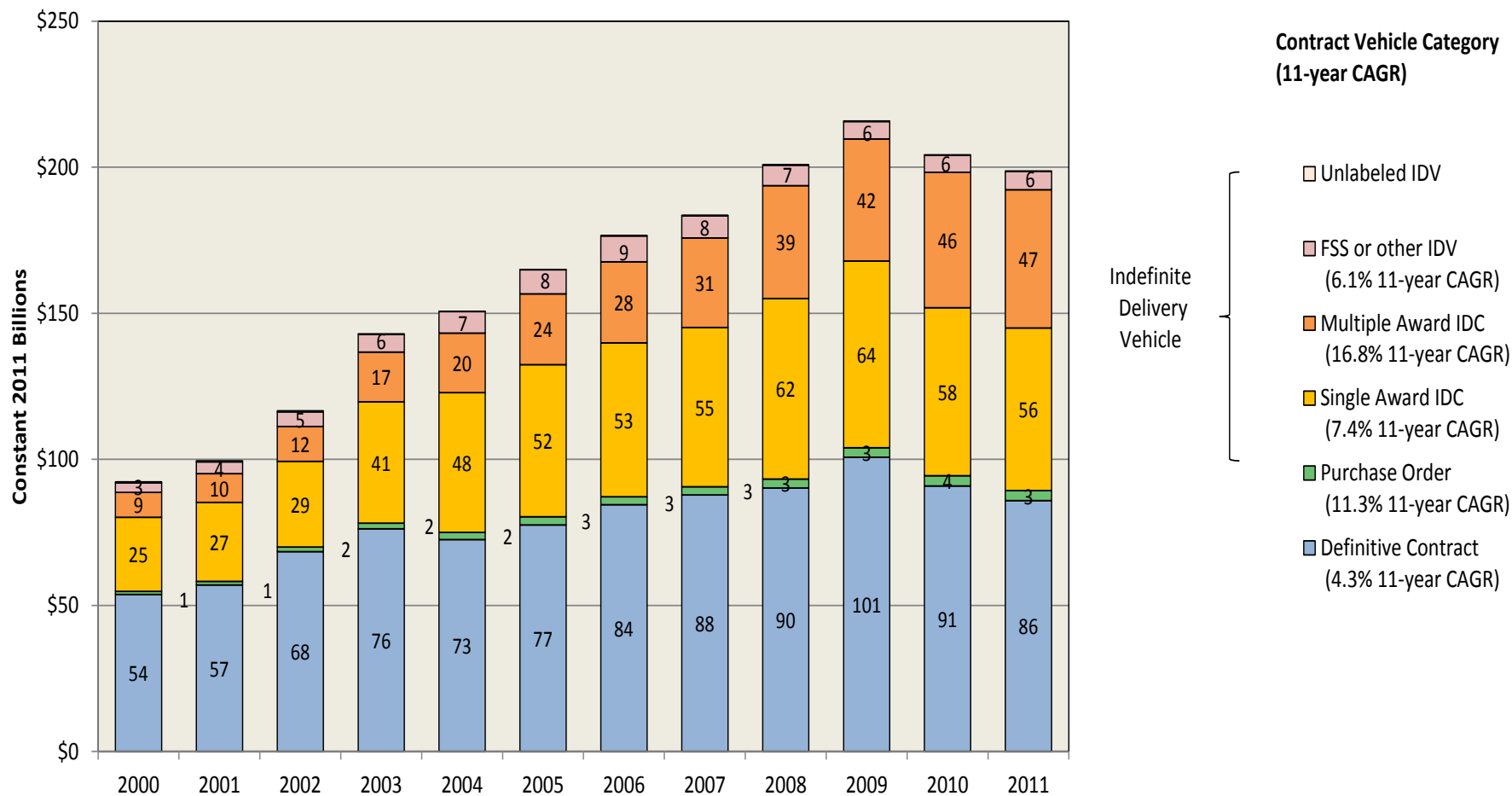
## Defense Service Contract Spending by Component, 2000-2011



## Defense Service Contract Spending by Service Area, 2000-2011

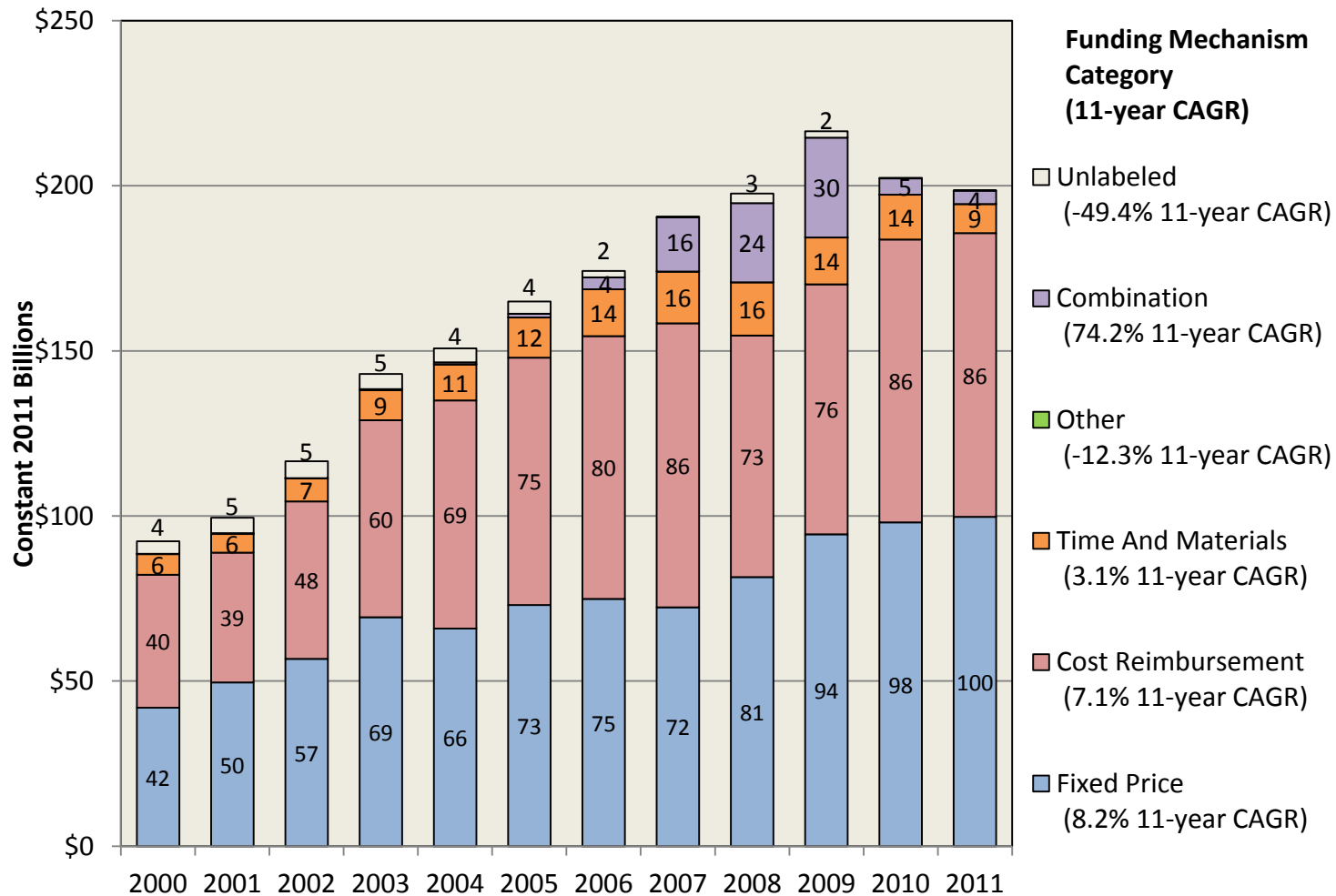


# Defense Service Contract Spending by Contract Vehicle, 2000-2011

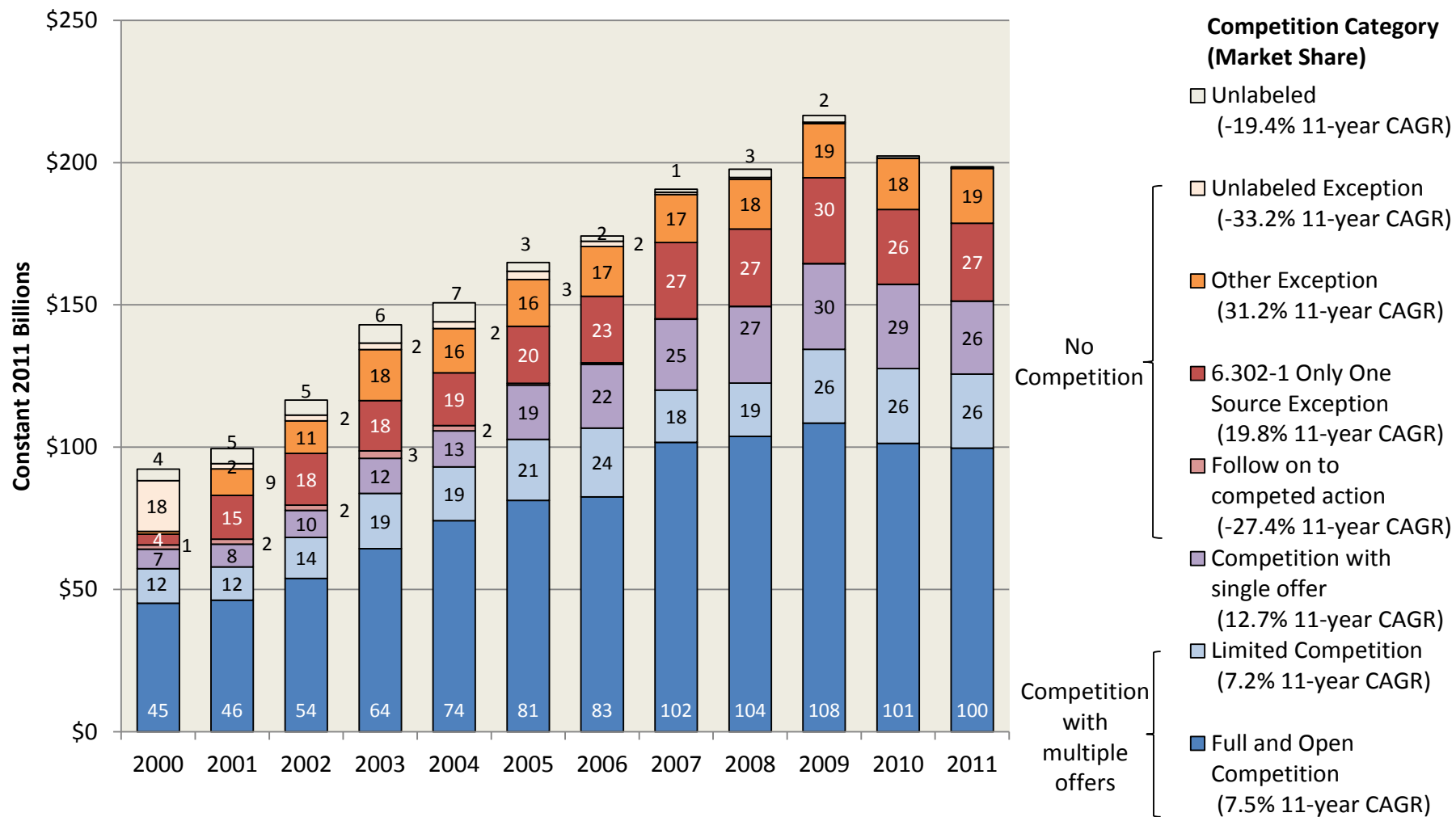


Note: Total numbers do not match with those in other slides due to use of the FPDS.gov web tool as the source for this slide. Regular updates by FPDS administrators can change back year totals.

# Defense Service Contract Spending by Funding Mechanism, 2000-2011

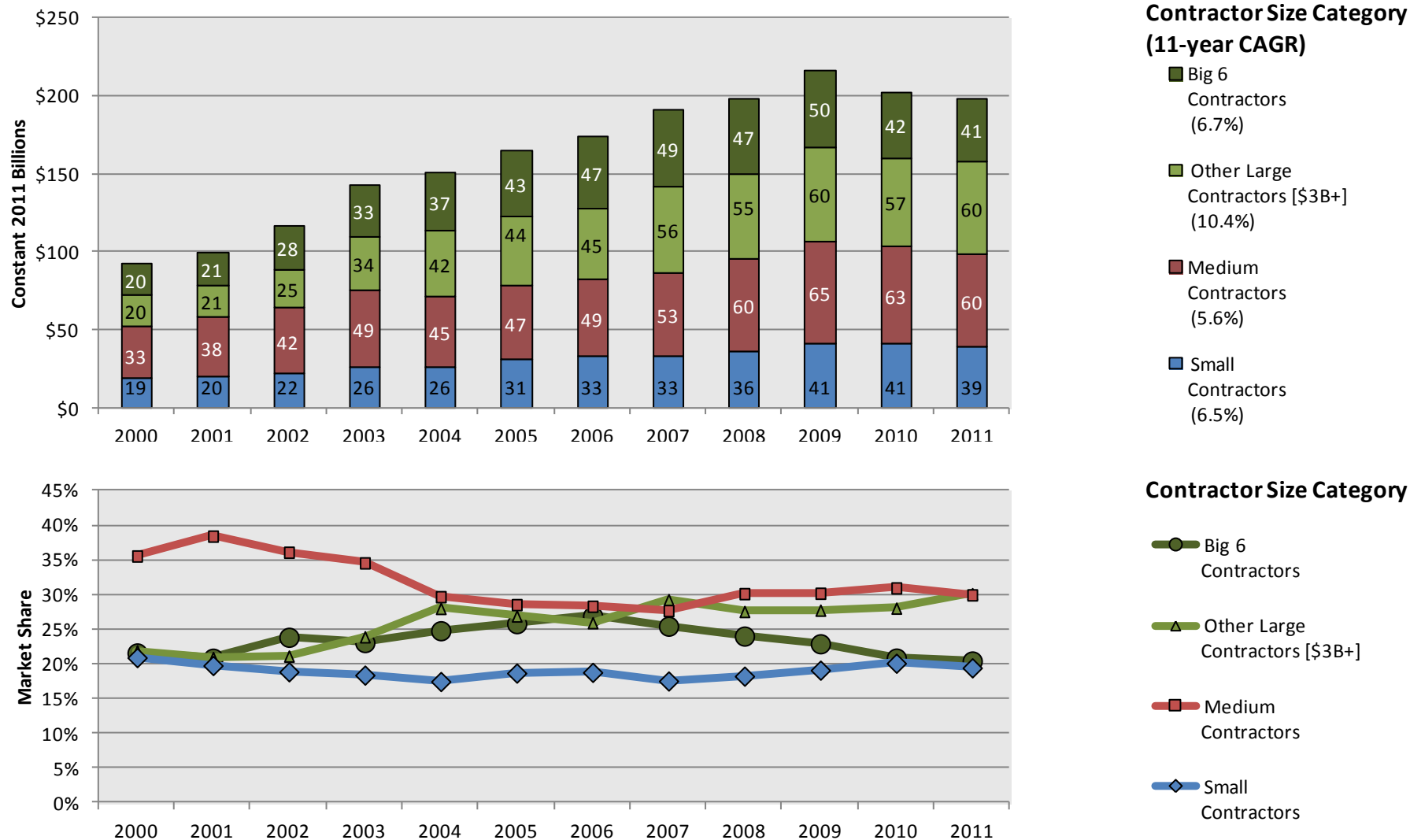


# Defense Service Contract Spending by Level of Competition, 2000-2011





## Defense Service Contract Spending by Contractor Size, 2000-2011



Source: FPDS, Bloomberg government contract database; analysis by CSIS Defense-Industrial Initiatives Group

Top 20 Defense Services Contractors, 2000-2011

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	Top 20 Contractors in 2000	Obligations in 2011 Millions	Top 20 Contractors in 2011	Obligations in 2011 Millions
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## Appendix 2: DoD vs. CSIS Service Category Comparison

Product or Service Code	CSIS Service Category	DoD Portfolio
<b>A - Research &amp; Development</b>	PAMS and R&D	R&D
<b>B - Special Studies &amp; Analyses - Not R&amp;D</b>	PAMS	Knowledge-based Services
<b>C - Architect &amp; Engineering - Construction</b>	PAMS	FRS
<b>D - Automatic Data Processing &amp; Telecommunication</b>	ICT	ECS
<b>E - Purchase of Structures &amp; Facilities</b>	FRS&C	FRS
<b>F - Natural Resources &amp; Conservation</b>	FRS&C	FRS
<b>G - Social Services</b>	MED	FRS
<b>H - Quality Control, Testing, &amp; Inspection</b>	ICT and PAMS	ECS, ERS, and FRS
<b>J - Maintenance, Repair, &amp; Rebuilding of Equipment</b>	ERS and ICT	ECS, ERS, and FRS
<b>K - Modification of Equipment</b>	ERS and ICT	ECS, ERS, and FRS
<b>L - Technical Representative</b>	ICT and PAMS	ECS, ERS, and FRS
<b>M - Operation of Government Owned Facilities</b>	FRS&C	FRS
<b>N - Installation of Equipment</b>	ERS and ICT	ECS, ERS, and FRS
<b>P - Salvage Services</b>	ERS and FRS&C	ERS and FRS
<b>Q - Medical Services</b>	MED	MED
<b>R - Professional, Administrative, &amp; Management Support</b>	PAMS	ECS and Knowledge-based Services
<b>S - Utilities &amp; Housekeeping Services</b>	FRS&C and ICT	ECS and FRS
<b>T - Photographic, Mapping, Printing, &amp; Publications</b>	PAMS	Knowledge-based Services
<b>U - Education &amp; Training</b>	PAMS	Knowledge-based Services
<b>V - Transportation, Travel &amp; Relocation</b>	ERS and PAMS	Transportation Services
<b>W - Lease or Rental of Equipment</b>	ERS and ICT	ECS, ERS, and FRS
<b>X - Lease or Rental of Facilities</b>	FRS&C	FRS
<b>Y - Construction of Structures &amp; Facilities</b>	FRS&C	Construction Services
<b>Z - Maintenance, Repair, or Alteration of Real Property</b>	FRS&C	FRS